

January 23, 1840.

Sir JOHN BARROW, Bart., V.P., in the Chair.

John Pye Smith, D.D. was balloted for, and duly elected into the Society.

A paper was read, entitled "On the structure of Normal and Adventitious Bone." By Alfred Smee, Esq., communicated by P. M. Roget, M.D. Sec. R.S.

On examining, by means of a microscope, very thin sections of bone, prepared in a peculiar manner, the author observed a number of small, irregularly-shaped, oblong corpuscles, arranged in circular layers round the canals of Havers, and also rows of similar bodies distributed around both the external and the internal margins of the bone. Each corpuscle is connected by numerous filaments, passing in all directions with the Haversian canals and the margins of the bone, and also with the adjacent corpuscles. He finds that the canals of Havers are vascular tubes containing blood. The corpuscles themselves are hollow, and their cavities occasionally communicate with those of the canals; their length is equal to about two or three diameters of the globules of the blood. They exist in cartilaginous as well as osseous structures, and are found in every instance of adventitious bone, such as callus after fracture, morbid ossific growths either from bone or from other tissues; and the author has also ascertained their presence in the bony and cartilaginous structures of inferior animals, such as birds and fishes. Measurements relating to these corpuscles, by Mr. Bowerbank, are subjoined, from which it appears that their diameters vary from about the 10,000th to the 4000th, and their lengths from the 2300th to the 1400th part of an inch.

"An attempt to establish a new and general Notation, applicable to the doctrine of Life Contingencies." By Peter Hardy, Esq., F.R.S.

After premising a short account of the labours of preceding writers, with reference to a system of notation in the mathematical consideration of life contingencies, the author enters at length into an exposition of the system of symbols which he has himself devised, together with the applications which they admit of in a variety of cases.

January 30, 1840.

JOHN WILLIAM LUBBOCK, Esq., V.P. and Treasurer, in the Chair.

James Annesley, Esq., was balloted for, and duly elected into the Society.

A paper was read, entitled "Observations on Single Vision with

two Eyes." By T. Wharton Jones, Esq. Communicated by Richard Owen, Esq., F.R.S.

The author animadvertes on the doctrine which Mr. Wheatstone, in his paper on the Physiology of Binocular vision, published in the Philosophical Transactions for 1838, p. 371, has advanced, in opposition to the received theory of single vision being dependent on the images of objects falling on corresponding points of the two retinae. He maintains that, under these circumstances, the two impressions are not perceived by the mind at the same instant of time, but sometimes the one and sometimes the other. If one impression be much stronger than the other, the former predominates over, or even excludes the other; but still the appearance resulting from the predominating image is nevertheless in some manner influenced by that which is not perceived. He supposes that there are compartments of the two retinae, having certain limits, of which any one point or papilla of the one corresponds with any one point of the other, so that impressions on them are not perceived separately; and considers that this hypothesis, combined with the principle above stated, is required, in order to explain the phenomena in question.

February 6, 1840.

JOHN WILLIAM LUBBOCK, Esq., V.P. and Treasurer, in the Chair.

John Parkinson, Esq. and the Rev. Charles Pritchard, M.A. were balloted for, and declared duly elected into the Society.

A paper was read, entitled "Observations on the Blood-corpuscles of certain species of the Genus *Cervus*." By George Gulliver, Esq., F.R.S., Assistant Surgeon to the Royal Regiment of Horse Guards.

The author has found that the blood of the Muntjac*, the Porcine†, and the Mexican Deer‡, contains, together with corpuscles of the ordinary circular form, a still larger number of particles of less regular shape; some curved and gibbous in the middle, and acutely pointed at the ends, with a concave and convex margin, like a crescent; others approaching more nearly to segments of a circle; some shaped like a comma, being obtuse at one end and terminated by a pointed curve at the other; others having an acute projection of the convex part, so as to constitute a triangular, or even quadrangular outline; some having the figure of the head of a lance; while a few presented a double or sigmoid flexure, as if they had been twisted half round at the middle. Like the ordinary blood-discs, these peculiar corpuscles are deprived of their colouring matter by water; but with only a small quantity of water they quickly swell out, and

* *Cervus Reevesii*.

† *C. Porcinus*.

‡ *C. Mexicanus*.